ABSTRACT

The present invention relates to an improved die member, panel and fastener assembly and method for installing a fastener into a panel. The die member has a pair of opposed clinching lips protruding from an end face. The opposed clinching lips have a contact face that narrows as it approaches the opposed ends of the contact face and sidewalls that are angled with respect to vertical. The lips, due to the dual angles, substantially and simultaneously drive panel metal into fastener grooves both longitudinally and laterally. The fastener and panel assembly have panel metal deformed into the fastener grooves resulting in generally wedge-shaped portions of panel metal in the opposed ends of the fastener grooves.